

Federal Communications Commission

§ 21.201

control circuits have been placed in a condition to activate the transmitter.

(2) Facilities which will permit the operator to turn transmitter carrier on and off at will.

(f) Transmitter control circuits from any control point shall be so installed that grounding or shorting any line in the control circuit will not cause the transmitter to radiate: *Provided, however*, That this provision shall not be applicable to control circuits of stations which normally operate with continuous radiation or to control circuits which are under the effective operational control of responsible operating personnel 24 hours per day.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 37783, Oct. 9, 1987; 63 FR 65101, Nov. 25, 1998]

§ 21.119 [Reserved]

§ 21.120 Authorization of transmitters.

(a) Except for transmitters used at developmental stations, each transmitter shall be a type which has been certificated by the Commission for use under the applicable rules of this part.

(b) Any manufacturer of a transmitter to be produced for use under the rules of this part may request certification by following the applicable procedures set forth in part 2 of this chapter. Type accepted and notified transmitters are included in the Commission's Radio Equipment List.

(c) Certification for an individual transmitter may also be requested by an applicant for a station authorization, pursuant to the procedures set forth in part 2 of this chapter.

[44 FR 60534, Oct. 19, 1979, as amended at 49 FR 3999, Feb. 1, 1984; 50 FR 7340, Feb. 22, 1985; 58 FR 49226, Sept. 22, 1993; 59 FR 19645, Apr. 25, 1994; 61 FR 26676, May 28, 1996; 63 FR 36603, July 7, 1998]

§ 21.121 [Reserved]

§ 21.122 Microwave digital modulation.

(a) Microwave transmitters employing digital modulation techniques and operating below 15 GHz shall, with appropriate multiplex equipment, comply with the following additional requirement: The bit rate, in bits per second, shall be equal to or greater than the bandwidth specified by the emission

designator in Hertz (e.g., to be acceptable, equipment transmitting at a 6 Mb/s rate must not require a bandwidth of greater than 6 MHz), except the bandwidth used to calculate the minimum rate shall not include any authorized guard band.

(b) For purposes of compliance with the emission limitation requirements of § 21.106(a)(2) of this part and the requirements of paragraph (a) of this section, digital modulation techniques are considered as being employed when digital modulation contributes 50 percent or more to the total peak frequency deviation of a transmitted radio frequency carrier. The total peak frequency deviation shall be determined by adding the deviation produced by the digital modulation signal and the deviation produced by any frequency division multiplex (FDM) modulation used. The deviation (D) produced by the FDM signal shall be determined in accordance with § 2.202(f) of part 2 of this chapter.

(c) Transmitters employing digital modulation techniques shall effectively eliminate carrier spikes or single frequency tones in the output signal to the degree which would be obtained without repetitive patterns occurring in the signal.

[44 FR 60534, Oct. 19, 1979, as amended at 46 FR 23451, Apr. 27, 1981; 49 FR 37775, Sept. 26, 1984; 58 FR 49226, Sept. 22, 1993; 61 FR 26676, May 28, 1996]

Subpart D—Technical Operation

§ 21.200 Station inspection.

The licensee of each station authorized in the radio services included in this part shall make the station available for inspection by representatives of the Commission at any reasonable hour.

[44 FR 60534, Oct. 19, 1979, as amended at 52 FR 37783, Oct. 9, 1987]

§ 21.201 Posting of station license.

(a) The instrument of authorization, a clearly legible photocopy thereof, or the name, address and telephone number of the custodian of the instrument of authorization shall be available at